



California Regional Water Quality Control Board

Santa Ana Region



Winston H. Hickox
Secretary for
Environmental
Protection

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Gray Davis
Governor

February 9, 1999

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SDMS # 66814

Ms. Carol A. Yuge, Director
Lockheed Martin Corporation
Corporate Environment, Safety & Health
West Coast Projects Office
2550 N. Hollywood Way, 3rd Floor
Burbank, CA 91505-1055

LOCKHEED MARTIN CORPORATION'S TEMPORARY TREATMENT SYSTEMS AT CITY OF RIVERSIDE GAGE WELL FIELD - OPERATIONS AND MONITORING PLAN (CLEANUP AND ABATEMENT ORDER No. 94-37)

Dear Ms. Yuge:

We have reviewed the January 18, 1999, report titled "Operations and Monitoring Plan for the Temporary Treatment Systems at City of Riverside Gage Well Field (Gage 26-1 and 27-1)." This report was submitted in accordance with the implementation of Alternative 5 (Containment Work Plan). This report describes procedures for operation and monitoring of two temporary treatment systems to remove trichloroethylene (TCE) from groundwater at Gage Wells 26-1 and 27-1, before entering the Gage Canal Pipeline, prior to blending in the Linden-Evans Reservoir. Each temporary treatment system will have the same design, configuration and equipment. The temporary treatment systems will operate for a period of 6 to 12 months at each well until more permanent treatment facilities are constructed. Each temporary treatment system will contain six GAC vessels and have the ability to treat a maximum design flow capacity of approximately 3,450 gallons per minute (gpm). Each GAC vessel is designed to provide an empty bed contact time of 10 minutes when operating at the nominal flow rate of 530 gpm, in parallel. Sample ports will be provided to monitor water quality. Special intermediate ports will be located on each of the GAC vessels at 25, 50, 75 and 100% of the bed depth to monitor the TCE mass transfer zone.

Based on our review of the operations and monitoring plan for the temporary treatment systems for Gage Wells 26-1 and 27-1, we believe that the design conditions and parameters for construction of the temporary treatment systems correspond with the previously submitted design specifications for the Tippecanoe Regional Treatment Plant. Therefore, we approve this operations and monitoring plan.

If you have any questions, please contact Robert L. Holub at (909) 782-3298 or Kamron Saremi at (909) 782-4303.

Sincerely,

Gerard J. Thibeault
Executive Officer

cc: Mr. Kevin Mayer, U.S. Environmental Protection Agency
Ms. Toby Roy, Department of Health Services, Division of Drinking Water
Mr. Dieter Wirtzfeld, City of Riverside, Department of Utilities
Mr. Ross Lewis, The Gage Canal Company

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California Environmental Protection Agency



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